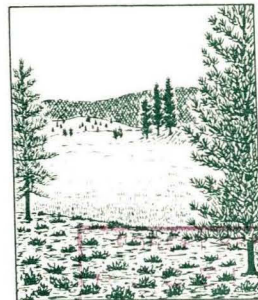


FOREST RESEARCH NOTES

CALIFORNIA FOREST AND RANGE EXPERIMENT STATION
GEORGE M JEMISON, DIRECTOR

U.S. DEPARTMENT OF AGRICULTURE - FOREST SERVICE



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OREGON LIMITS OF CALIFORNIA TREE SEED COLLECTION ZONES

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Tree seed used for artificial reforestation should be collected from a source having a climate similar to that where the trees will be grown. Nearby seed sources are likely to be the safest. However, seed crops may fail locally or be destroyed, and seed then must be obtained from other places. For example, the seed crop of Douglas-fir in many areas of northern California was largely destroyed by insects in 1954 (3).

Several years ago the California Forest and Range Experiment Station published a map showing tree seed collection zones for California (2). This paper extends the seed collection zones of northern California into southern Oregon (see attached map). The extension will enable foresters to obtain seed from somewhat larger areas with assurance that the seed will produce trees suited to the climatic environment.

The criteria used in delineating the original tree seed collecting zones in California were, in descending order of importance, vegetation types, species composition of coniferous trees, site, and latitude (2). In extending the zones into Oregon, average annual temperature, minimum temperature, length of frost-free period, and warm-season precipitation were also considered. Maps prepared by the U. S. Department of Agriculture were considered authoritative (1, 4).

The northern boundaries of Douglas, Klamath, and Lake Counties, Oregon, were chosen as the northern limits for collecting seed to be used in California. These boundaries were picked primarily because they conform to the generally accepted latitudinal limit for seed collection, that is, 100 miles north or south of the place to be planted. Secondly, they were chosen because they are definite locations which can be easily described and determined on the ground.

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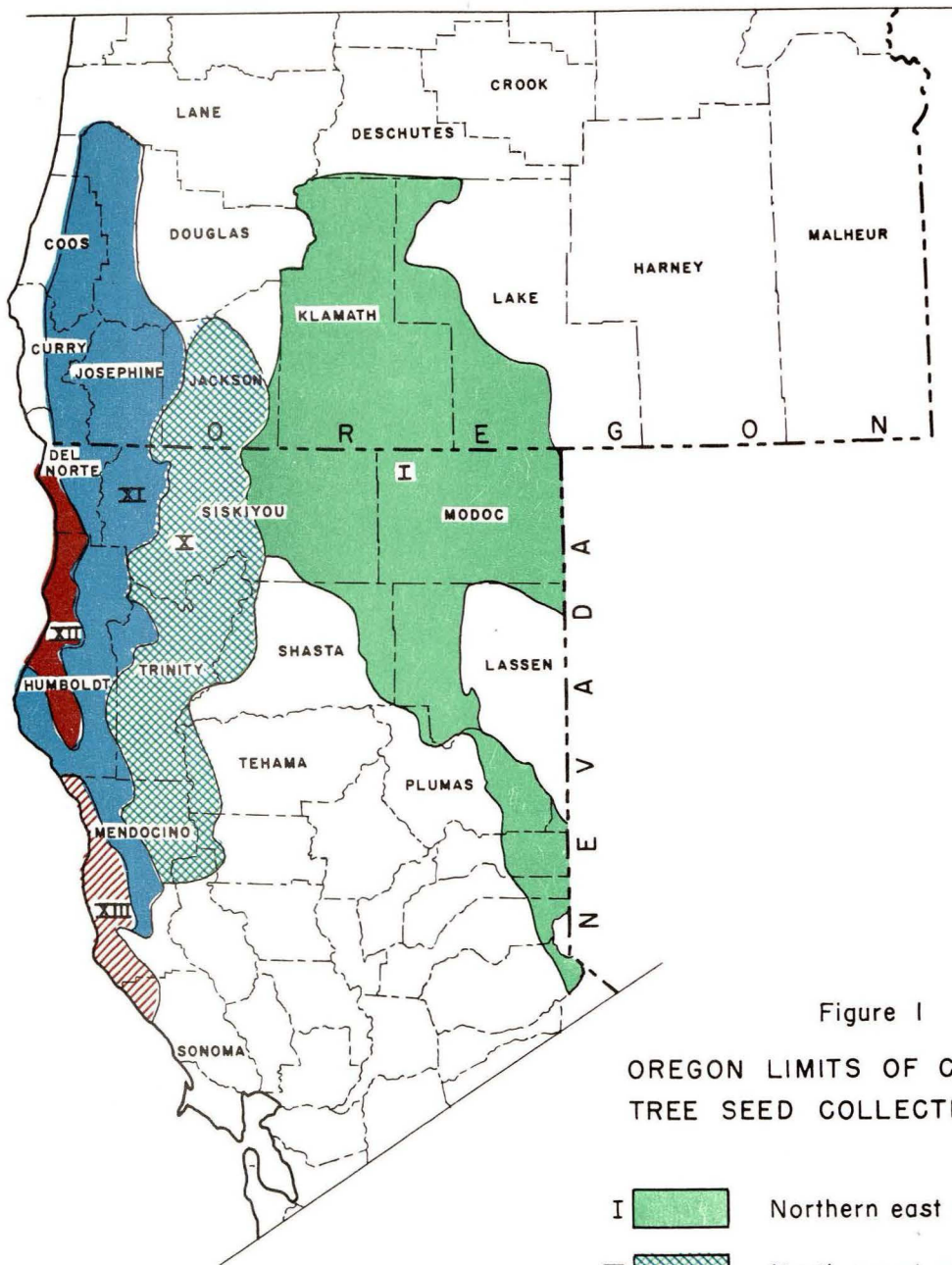


Figure 1

OREGON LIMITS OF CALIFORNIA
TREE SEED COLLECTION ZONES

- | | | |
|------|---|---------------------------|
| I |  | Northern east side Sierra |
| X |  | North coast pine |
| XI |  | Coast range Douglas-fir |
| XII |  | Northern redwood |
| XIII |  | Southern redwood |

0 50 100 150
SCALE IN MILES